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ABSTRACT

Tattletooth was designed to help alleviate the physical, psychological and social problems associated with dental disease by teaching proper dental hygiene techniques and by stressing the importance of good dental health to the social and psychological well-being of the whole person. The program provided for the entire community with the provision of supportive information packages specially prepared for specific community groups. Children received support in their efforts to form good dental habits from teachers, parents, dentists, and hygienists, and local suppliers of toothbrushes, dental floss, and disclosing wafers. In the pilot test, curriculum was designed by teams of teachers, dentists, curriculum designers, and evaluators. Four sets of 19 lessons each were prepared, covering grades K-2, 3-6, Jr. High School, and Sr. High School. These were pilot tested in 111 classrooms in Texas in the Spring of 1975, and this report covered the evaluation strategy, instruments, and results. This report concluded that the materials were quite successful, particularly in the early grades. It was found that the humanistic approach was generally well received and that the entire model for presenting this subject might be equally useful for many other courses. (Author/BJG)

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ED117131

REPORT

OF

Evaluation of Training and Curriculum Materials used in a Pilot Test of a Comprehensive Dental Health Program (TATTLETOOTH)

Submitted to

Bureau of Dental Health
Texas Department of Health Resources
1100 West 49th Street
Austin, Texas 78756

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TM004 983

ABSTRACT

The Department of Health, Education and Welfare contracted with the Texas Department of Health Resources (Bureau of Dental Health) for the development of an improved dental health curriculum for elementary and secondary grades.

The need for an effective dental health program is clear. Dental disease is a major health problem nationally; it often goes untreated, and it could, in large measure, be prevented by adequate care of the mouth and teeth. Equally unfortunate is the psychological and social suffering that is often attendant upon poor dental health. The Tattletooth curriculum has been designed to help alleviate these problems by teaching proper dental hygiene techniques and by teaching importance of good dental health to the social and psychological well-being of the whole person.

The program is humanistic in that it relates dental hygiene and the problems of poor dental health to physical, mental, social, and emotional aspects of the total person. Perhaps most importantly, the new program provides for the involvement of the entire community with the provision of supportive information packages specially prepared for specific community groups. Children receive support in their efforts to form good dental habits from teachers, parents, dentists, and hygienists, and local suppliers of toothbrushes, dental floss, and disclosing wafers.

During the year's work, curriculum was designed by teams of teachers, dentists, curriculum designers, and evaluators. Four sets of 10 lessons each were prepared, covering grades K-2, 3-6, Jr. High School, and Sr. High School. These were pilot tested in 111 classrooms in Texas in the

Spring of 1975, and this report covers the evaluation strategy, instruments, and results.

The report concludes that the materials were quite successful, particularly in the early grades. It was found that the humanistic approach was generally well received and that the entire model for presenting this subject might be equally useful for many other courses. It was not opportune, during the pilot test, to involve the other participants and community support.

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I. INTRODUCTION

In September 1974 the Educational Development Corporation was requested to participate in an ongoing project, designed to develop and evaluate a comprehensive dental health education curriculum in Texas. This corporation agreed to provide organization and planning expertise and, as a major focus, to plan and carry out an evaluation of three aspects of the project, as follows:

1. a training and orientation conference for Education Service Center personnel selected for the pilot testing of the developed curriculum materials;
2. the training sessions at which these Education Service Center personnel would, in turn, present the curriculum to the classroom teachers chosen to pilot the project (5 centers, 111 teachers);
3. the lesson plans produced consisting of ten lessons each for four grade levels (K - 2, 3 - 6, Junior High and Senior High).

The planning and consultation efforts continued throughout the various steps of the project; the evaluation effort is described in this report.

The evaluation and test design required the cooperation of many busy people, including dentists, Texas Department of Health Resources personnel, Education Service Center representatives, school administrators, and classroom teachers. The continued assistance of George Higginson, M.B.A., was useful in conceptualizing and organizing the work. The contributions of all who gave so freely of their time are gratefully acknowledged. Cheryl Levandoski, the Project Director, was most helpful throughout in supporting and facilitating the evaluation process.

II. DESCRIPTION OF THE EVALUATION

A. Purpose and Scope

At this stage of the project, the evaluation was designed to concentrate on refining the materials produced, both for the training sessions and for classroom use. There was no effort to measure the cognitive or behavioral impact of the program materials on students, though the participating teachers were asked to make some judgment concerning the involvement of their students. The main goals were

1. to provide input for improvement of the training materials and the presentation format;

2. to gather data for
   a. refinement of the curriculum materials developed,
   b. possible future expansion of the program, and
   c. more accurate grading of the lesson plans.

In addition, it was considered desirable to request attitude and opinion data from the users of the project materials in order to judge the general acceptability of the concept and approach.

The time and money constraints on the evaluation research were quite stringent. Development of the materials was, of course, the major effort of the project, requiring the great bulk of both the time and funds available. The extremely tight schedule caused specific problems in some of the schools, resulting in limited data, especially in the high school sample. Many responding teachers noted that High School curriculum schedules are finalized fairly early in the school year, and that additions and changes are rarely possible. This was also true, but to a lesser extent, in the junior

high schools. Thus the evaluation results are most complete and reliable for the kindergarten through sixth grade groups. All available data are presented, however, since it is felt that informed input is of critical value in the formative phase of a project.

B. Instruments and Procedure

Five separate instruments were constructed, mostly requesting immediate experience and opinion feedback. Three questionnaires were distributed following the training sessions, two at the first conference held in Austin, and one at the Regional teacher-training sessions. These instruments were designed to evaluate the effectiveness of the training and the acceptability of the materials and format. The remaining two questionnaires were distributed along with the individual lesson plans, one to gather opinions about the specific curriculum plan and activities, and another to summarize reactions to the entire series, and also to gather some information about teacher attitudes and demography of their classes.

The five instruments, which were all originally color-coded for easy recognition, are found in the Appendix, as follows:

1. Training Evaluation Sheet
   (for Service Center Trainers) - blue

2. Training Evaluation Sheet
   (for Participating Dentists) - green

3. Inservice Training Evaluation Sheet
   (for teachers) - pink

4. Lesson Evaluation Sheet
   (one for each teacher, for each lesson plan, for each grade level) - yellow

5. Summary Evaluation Sheet
   (one for each teacher) - gold

The Training Evaluation Sheets for Service Center personnel and participating dentists were distributed immediately following the two-day conference in Austin, during a scheduled evaluation period, and they were collected immediately. The Inservice Training Evaluation Sheets were distributed to the teachers by the Service Center Trainers. Once again, they were collected immediately after the sessions, with time allowed for their completion. They were forwarded to Austin for tabulation.

A Lesson Evaluation Sheet was included as a part of each lesson plan distributed to the teachers. (A conscious effort was made to construct a one-page instrument that would be "quick and easy.") In addition, at the time of training, each participating teacher was given two stamped addressed envelopes and one Summary Evaluation Sheet. The instructions (also listed on the sheets) were to fill out one evaluation form for each lesson used. Each teacher was given a packet of ten lessons, and, after completion of the first five, the filled-out questionnaires were to be enclosed in the first envelope and mailed to the Department of Health Resources. After the remaining lessons were tried out, the teacher was instructed to fill out the Summary Evaluation Sheet, enclose it with the remaining five Lesson Evaluation Sheets in the second envelope, and mail it also to the Department of Health Resources. The evaluation forms were then all forwarded to the Educational Development Corporation for analysis and interpretation.

Since the main focus of the effort was to gather useful and sincere input from participants, no effort was made to insure anonymity. The tone and format of the training and the approach of the curriculum materials involved interpersonal awareness and humanistic values, and the importance of an honest and helpful evaluation was stressed. It is felt that all who

answered the questionnaires gave responsible and thoughtful responses, both positive and negative, and there was considerable evidence of real interest in the comments and suggestions received.

III. EVALUATION DATA

A. Training Conference (Austin)

The first step in the pilot test was a two-day conference, held in Austin, at which the curriculum materials were presented to representatives of the five Education Service Centers selected for the try-out. A number of interested dentists also attended, including those who would have the responsibility of providing technical support in the Regions. The "Team Leaders" who had spear-headed the curriculum development work and the media experts who had designed the finished product joined with project organizers and others directly involved to present a comprehensive orientation and training session. The philosophy and rationale were described, technical dental material was offered, and the evaluation plan was outlined. The leading "Tattletooth" characters were introduced via cut-outs and transparencies. The lesson plan packages were distributed, and sample lessons were demonstrated. An effort was made to stress humor, informality, and human interaction.

Both Service Center trainees and participating dentists were asked to evaluate this training, and their responses are summarized in the following sections.

Service Center Representatives

Of the five Regional Service Center representatives attending, a majority found the training generally clear and sufficient, the materials helpful, the presentation well-organized, both technical-dental and educational instruction clear, the time utilized about right, and the whole training experience about average. They felt that there was enough time to ask questions, and they would have liked more coverage of the lesson plans.

While only three of the five felt competent to teach the materials in their Regions, all felt that the training was necessary, enjoyable, and easily understood. They felt that the presenters knew their material well and that there was a minimum of boring repetition.

Some minority criticisms included finding the training generally too sketchy, the materials only so-so, the presentation a little loose, both technical-dental and educational instructions not quite clear, and the schedule too crowded. One of the five felt that there was insufficient time for individual problems. However, two of the five felt that this training experience was better than most, and none found it less satisfactory than most.

The majority appreciated the informal tone and approach, but several suggestions were made that might lead to specific improvements. These included

a. more time;
b. checking materials more carefully beforehand;
c. more technical back-up;
d. a technical resources list;
e. a chance to become familiar with the materials and information earlier.

Participating Dentists

Nine dentists attended the training conference and completed the evaluation sheets. A clear majority (7, 8, or 9) found the training generally clear and sufficient, the materials helpful, the presentation well-organized, the educational instructions clear, and the time utilized about right. Five found the technical-dental instructions clear, but one felt they were confusing, one not quite clear, and one thought they were too technical for teachers. (One did not respond.) They were unanimous in finding that there was enough opportunity to ask questions and that the dental material in the packets was accurate and sufficient. All nine responded in identical fashion to the true-

false portion of the evaluation, feeling that they were competent to train teachers in the dental information required, that the training session was necessary, enjoyable, and understandable, that the presenters knew their material well, and that there was not too much boring repetition.

One dentist would have liked more coverage of the philosophy and rationale, two wanted more coverage of the lesson plans, one would have increased time spent on technical-dental material, and two wanted to know more about the evaluation. There was considerable enthusiasm about the planning, effectiveness, tone, and format of the training, and also about the graphics and educational material. Suggestions for improvement included

a. a little more time;
b. emphasize "no toothpaste needed";
c. simpler dental material, completely revamped;
d. more complete explanation relating philosophy to classroom teaching;
e. more time between getting materials and using them in schools.

B. Regional Inservice Training (5 Regions)

Courses were presented in five Regions, with attendance ranging from 17 to 26. The responses, by Region, can be summarized in the following chart (Table 1).

Table 1

SUMMARY OF INSERVICE TEACHER TRAINING QUESTIONNAIRE

		Region III	Region IV	Region VI	Region IX	Regio XIX
The training, generally, was	clear and sufficient	23	26	17	21	21
	too sketchy	0	0	0	3	0
	confusing	0	0	0	0	0
The training materials were	unhelpful	0	0	0	0	0
	only so-so	1	0	0	0	0
	helpful	21	26	16	24	20
The presentation was	well-organized	11	25	15	20	18
	a little loose	10	0	0	3	2
	sloppy	0	0	0	0	0
The technical-dental instructions were	confusing	0	1	0	0	0
	not quite clear	0	1	1	4	0
	clear	22	24	16	20	21
The educational program instructions were	confusing	0	0	0	0	0
	not quite clear	2	1	0	6	2
	clear	20	25	17	16	19
The whole course was	too long	0	0	1	1	0
	about right	23	25	16	19	21
	too crowded	0	0	0	4	0
I felt that there was	too much time spent on individual questions	0	0	0	1	0
	enough opportunity to ask questions	23	23	17	17	21
	insufficient time for individual problems	0	2	0	5	0
I felt this training was	better than most	13	22	11	18	14
	about average	10	4	6	5	7
	less satisfactory than most	0	0	0	0	0
I would have liked more coverage of	the philosophy and rationale	0	2	0	0	0
	the lesson plans	10	5	10	12	11
	technical dental material	5	7	2	9	4
	the evaluation procedure	1	6	0	2	3
I feel confident about my ability to handle the materials in this teaching program.	true	23	25	17	19	18
	false	0	0	0	4	2
I really could have done without this inservice training.	true	3	2	2	1	0
	false	18	22	14	22	20
The training experience was generally enjoyable.	true	22	26	17	23	21
	false	0	0	0	0	0

Table 1

(continued)

		Region III	Region IV	Region VI	Region IX	Region XIX
The trainers seemed to know the subject.	true	23	26	17	23	21
	false	0	0	0	1	0
I was bored most of the time.	true	1	0	1	0	0
	false	22	26	15	24	20
Dental education is really needed in my class(es).	true	23	21	17	23	20
	false	0	2	0	0	0
I feel that I understand most of the instructions.	true	23	25	17	22	20
	false	0	0	0	2	0
I know where I can get help with this program if I need it.	true	22	26	17	24	21
	false	1	0	0	0	0

The general consensus was, as can be seen, overwhelmingly positive in all five Regions. Many commented on the timeliness of the program and the need for it. Among the most frequently offered suggestions for future improvement were the following:

a. more advance notice, more preparation time;
b. more detailed work on lesson plans;
c. should be given in the Fall;
d. dental health films in school library;
e. more demonstration of lessons;
f. more suggestions about where to find answers;
g. more time on dental information, brushing and flossing.

C. Lesson Plans

The main purpose for this aspect of the evaluation effort was to provide formative feedback for refining and more accurately grading the individual lesson plans. Complete data summaries were made available to the team working on editing and improving the curriculum materials. The following tables present condensed assessments of the ten lessons for each grade level.

Kindergarten - Grade Two

As is obvious in Table 2, the K - 2 lesson plans were generally highly acceptable to the teachers. The "overall assessment" was based on a combination of several of the questionnaire items, involving ease of use, whether the teacher would use it again, clarity of the dental health message, and sufficiency of the materials provided. These plans, with the possible exception of Lesson 2, which was perceived as a little difficult, were on-target, and there was little criticism. Kindergarten teachers frequently reminded the developers that their students cannot read, but they generally adapted the lessons to the appropriate level.

Table 2

Lesson Plan Assessments (Majority Responses)
Kindergarten through Second Grade

	Student Response	Time	Materials	Grade Level	Overall Assessment	N *
Lesson 1	enthusiastic	about right	easily available	2, but adaptable	highly positive	32
2	so-so	about right	none needed	3	positive	33
3	enthusiastic	about right	easily available	K - 2	highly positive	35
4	enthusiastic	about right	easily available	K - 2	highly positive	35
5	enthusiastic	about right	none needed	1, 2	highly positive	34
6	enthusiastic	about right	easily available	K - 2	highly positive	32
7	enthusiastic	about right	easily available	K - 2	highly positive	29
8	enthusiastic	about right	easily available	K - 2	highly positive	30
9	enthusiastic	about right	easily available	K - 2	highly positive	21
10	enthusiastic	about right	easily available	K - 2	highly positive	13

*Number of teachers responding

Grades Three - Six

Table 3 shows that, again, the teachers found the lesson plans highly acceptable, that the timing was appropriate, the materials easily available, and the grade-level generally correct. Student response was a little more variable than in the lower grades. Many teachers urged specific graded material, stressing the differences between third and sixth graders.

Table 3

Lesson Plan Assessments (Majority Responses)
Third Grade through Sixth Grade

	Student Response	Time	Materials	Grade Level	Overall Assessment	N*
Lesson 1	generally positive	about right	none required	5, but adaptable	highly positive	42
2	generally positive	about right	easily available	3 - 6	highly positive	43
3	enthusiastic	about right	easily available	3 - 6	highly positive	42
4	generally positive	about right	easily available	3 - 6	highly positive	42
5	so-so	about right	easily available	5, 6	positive	38
6	generally positive	about right	easily available	3 - 6	highly positive	34
7	enthusiastic	about right	easily available	3 - 6	highly positive	35
8	enthusiastic	about right	easily available	4 - 6	highly positive	29
9	generally positive	about right	easily available	4 - 6	highly positive	32
10	enthusiastic	about right	easily available	4 - 6	highly positive	29

*Number of teachers responding

Junior High School

Table 4

Lesson Plan Assessments (Majority Responses)
Junior High School

	Student Response	Time	Materials	Grade Level	Overall Assessment	N*
Lesson 1	enthusiastic	about right	easily available	7	positive	10
2	so-so	about right	none needed	5, 6	neutral	11
3	generally positive	too long	easily available	7 - 9	positive	10
4	enthusiastic	about right	easily available	7, 8	highly positive	7
5	so-so	about right	easily available	7	positive	9
6	so-so	about right	easily available	7 - 9	neutral	6
7	generally positive	about right	easily available	7 - 9	highly positive	7
8	generally positive	about right	none needed	6, 7	positive	7
9	enthusiastic	about right	easily available	7 - 9	neutral	7
10	enthusiastic	about right	none needed	7, 8	highly positive	7

*Number of teachers responding

As previously pointed out, adding a dental health unit late in the year was much more difficult in the higher grades, and few junior high teachers were able to utilize the materials and complete the evaluations. Those who

did were almost all seventh grade teachers, with only an occasional response from the eighth and ninth grade. (An interesting approach was tried in one school, where the teacher asked the students to write evaluation letters. These will be discussed with the summary evaluation sheets.)

The overall assessments were more often neutral and positive than in the earlier grades, and the student response was quite variable. Once again the timing was appropriate, and materials were usually easily available. Several of the lessons were judged a little juvenile. The most frequent criticisms involved the lack of preparation time and the problem of starting something new at the end of the school year.

At least some attempts at using the "leadership" approach were made in Junior High School classes. In this approach, students prepared lessons and taught them to younger children. Results will be discussed in the Summary Evaluation Sheet section.

Senior High School

Table 5

Lesson Plan Assessments (Majority Responses)
High School

	Student Response	Time	Materials	Grade Level	Overall Assessment	N*
Lesson 1	so-so	about right	easily available	5 - 7	positive	3
2	generally positive	about right	easily available	6, 7 but adaptable	positive	4
3	generally positive	about right	easily available	10 - 12	highly positive	4
4	so-so	too long	easily available	6 - 10	neutral	4
5	generally positive	about right	none needed	10 - 12	highly positive	3
6	generally positive	too short	none needed	8 - 10	neutral	2
7	so-so	too short	none needed	10	neutral	2
8	so-so	too short	easily available	5, 9**	neutral	2
9	so-so	too short	easily available	2, 9**	neutral	2
10	so-so	too short	easily available	3, 9**	neutral	2

*Number of teachers responding

**One of the responding teachers was using the "leadership approach" and found the material appropriate; the other responded to the material as much too juvenile for his 12th graders.

Only a few high school teachers were able to use the program, either in whole or in part, and the evaluation results for this group must be considered

a very limited (but helpful!) indication of the programs' acceptability. Perception of the value of the lesson plans depended in part on whether the "leadership" approach was being used. Students appeared to respond fairly positively to the idea of teaching younger classes, but a teacher noted that they were not so motivated to learn or apply dental knowledge as related to their own behavior.

Even with this small number of responses, however, it would appear that some serious revisions in the Senior High School lessons are necessary before there can be a successful field test. In addition, participating teachers must be able to plan for a dental health unit early in the school year, or they will not be able to fit it in their schedules.

D. Note about the Artwork

The Lesson Evaluation Sheets contained a question about use of the artwork provided. The original concept involved considerable dependence on using this artwork to make transparencies for use with overhead projectors. Teachers were asked if they used this technique and, if not, how they used the artwork. For most of the lessons, at all grade levels, a majority did make transparencies. However, in Kindergarten through grade nine, a number of teachers made other use of the artwork, from providing copies for the children to color, to using it as a stimulus to inspire students to create their own art, to handing it around (Senior High School) as "comic relief." In the lower grades especially, there were a large number of original and ingenious uses reported, and some teachers seemed to enjoy the challenge of adapting the materials to fit their particular classroom needs and constraints.

E. Summary Evaluation Sheets

Teachers who had completed the full series of ten lesson plans were asked to complete a Summary Evaluation Sheet. Some participants wrote that they did not receive such a sheet with their packets. Others evidently did not fill in the summaries because they did not use all of the lessons. For whatever reason, only about half of the teachers sending in Lesson Evaluation Sheets completed the Summary Evaluation Sheets.

Kindergarten - Grade Two

All but one of the 17 teachers reported using these lesson plans in a regular classroom, and all classes were of both boys and girls. Two classes were racially homogeneous; all the rest were mixed. Half of the teachers felt that dental problems were widespread in their classes, about half felt they were about normal, and one reported that they were rare. Of the 17, five had never presented a dental health unit before, 9 had occasionally presented such a unit, and 3 had frequently done so. Fourteen said that they thought teaching programs could have a positive effect on dental health, while three were a little dubious about this. Most felt that the technical support was sufficient, though a small minority complained about this. Eleven teachers spread the lessons out, while six used them in a concentrated block. Seven of the classes brushed and flossed while ten did not. All but one wanted a wider range of lesson plans in dental health. All the teachers found their inservice training realistic and sufficient concerning the educational aspect, but two found the technical aspects a little sketchy. The two favorite lesson plans were numbers 4 and 9, and the least liked were numbers 2 and 1. The

overall opinions expressed were highly positive. Among the suggestions most frequently mentioned were

a. more pictures, less words for kindergarten and first grade classes;
b. more follow-up activities;
c. more information about visiting a dentist;
d. more information about losing baby teeth.

Grades Three - Six

Of the 28 teachers responding, 24 used the lessons in a regular classroom, 3 in a special subject class, and one in special education. Twenty-six of the classes were of boys and girls, one of girls only, and one of boys only. Seven of the classes were considered ethnically homogeneous, while 21 were mixed. Five teachers felt that dental problems were widespread in their classes; 21 said they were normally distributed; and only one considered them rare. Nine teachers had presented dental health units frequently, 17 occasionally, and 2 never. Twenty-three teachers felt that teaching programs can have a positive effect on dental health, while five were not certain. A majority of the respondents felt that they had enough technical support, but a significant group (6 and 8) wanted more from local dental sources and library references. Sixteen teachers spread the lessons throughout the trial period, while seven used them in a concentrated block. Eighteen of the classes brushed and flossed, while five did not. Fourteen teachers wanted development of a wider range of dental health lessons; three did not, and six had no opinion. All teachers found their inservice training realistic and sufficient in its educational aspect, while two found the technical aspect too sketchy. The favorite lesson plan was number 8, with 6, 7, and 10 also generally liked. Least favored was number 5, and it is interesting that number 8, which was the majority favorite, was also the second most disliked. The

overall opinion was quite positive, with many respondents mentioning the need for such a program and commending the tone and approach. Among the most frequent suggestions were

a. simplify the vocabulary;
b. let students create their own characters;
c. deal realistically with low-income problems;
d. introduce the tooth characters at all levels;
e. more parent involvement.

Junior High School

Only seven teachers completed the program and filled in Summary Evaluation Sheets. It is difficult to draw any reliable conclusions from such a small sample, but the results were tabulated, and some general statements are possible. These lessons were mostly used in special subject classes, consisting of both boys and girls, racially and ethnically mixed, with a normal number of dental problems. Only one reporting teacher had never given a dental health unit before, and only one had any question about the effectiveness of a teaching program on dental health habits. Most of the teachers felt they needed more technical support in training, from local dental sources, and from library references. Most of the units were taught in a concentrated block, and all of these classes brushed and flossed (5 were 7th grades,, one was 8th, and one a "1 - 8" physical education class). There was some division of opinion about a wider development of lesson plans, though most teachers were positive. These teachers were also somewhat critical of their in-service training, finding it a little sketchy, especially the technical aspects. The favorite lesson was number 1, while 5 was least liked. The overall opinions were guardedly positive, but there were a number of suggestions, including

a. more preparation time;
b. would prefer shorter program;
c. something on tooth decay and heredity;

d. more technical material for students;
e. greater range of material;
f. dental health taught in science rather than physical education.

Probably the most positive comments came from teachers who used the "leadership training" approach. Their students became really involved in preparing lessons and teaching them to fifth grade children. One 9th grade teacher (in a letter) stated that the reaction was so favorable, both from the Junior High students and their fifth-grade pupils, that the idea will be continued and expanded next year. Also, a number of physical education students from Houston were given the opportunity to evaluate the dental health program. Their letters were quite direct and generally positive. They showed an interest in their teeth and their appearance, and they appreciated the "awareness" aspects of the program. Many students, however, found the materials too juvenile.

Senior High School

Only one teacher completed the Summary Evaluation Sheet, which is too small a sample to serve as a base for any conclusions at all. The program was used in a physical education class for an ethnically homogeneous group of girls only, with a normal number of dental problems. The teacher had occasionally given dental health units before, and had some questions about the effectiveness of teaching programs in this area. Technical support was seen as adequate, and the inservice training as sufficient. The lessons were used in a concentrated block, and the students did not brush and floss. The teacher's favorite lesson was number 10, while number 1 was least liked. The main comments involved the difficulty of scheduling the program late in the year and the desirability of giving dental health instruction outside of the physical education class.

F. Note about Emphasis on Transparencies

At all grade levels, the teachers were asked to check a statement about their opinion of the program's emphasis on overhead projector transparencies. The results were as follows:

	K - 2	3 - 6	Jr. High	Sr. High	Total
I found the overhead projector transparencies easy to make and use and would like to see future lesson plans emphasize this medium.	8	7	2		17
I like these lesson plans in this medium, but I would like to see future lesson plans designed for something other than transparencies.	4	7	2	1	14
I used transparencies, but I wish some of these lesson plans, as well as future ones, could be designed for other media.	4	9	4		17
I dislike the emphasis on overhead projector transparencies and wish this approach would be dropped.	1	2			3
I was unable to make or use transparencies at all.	2	5	1		8

The large majority responded favorably to transparencies as a convenient medium, but there was also heavy support for utilizing other media, both in these lessons and those developed in the future. (It is particularly significant that some teachers were not able to make or use transparencies at all.)

IV. DISCUSSION

Though the evaluation results are quite variable, making it difficult to draw sweeping general conclusions, there are some trends that seem fairly clear. The curriculum materials were most enthusiastically received in the early grades, with teachers in the kindergarten through second grade being most positive, and the grades three through six only slightly less so. The more ready acceptance may at least partly represent a response to novelty, since there are not many dental health materials specifically aimed at the kindergarten and elementary school levels, while health curricula in the junior and senior high schools often offer at least some dental coverage.

In addition, however, the evaluation comments suggest that the Tattletooth program materials indeed are generally more suitable for younger children, and that successful teaching materials for junior and senior high schools need to have both greater range and more flexibility. Some successful "leadership" approaches mostly reinforce the impression that the materials are better aimed at the lower groups.

It is obvious, of course, that the program did not really have a fair trial in the junior and senior high schools. Teachers were just not able to fit the program into already crowded and demanding schedules, suggesting that preparations for any extended field test would need to be communicated to teachers very early in the school year. Those who did use the program in advanced grades frequently felt under-prepared and insufficiently supported from a technical standpoint, especially where available reference works are concerned.

Where the program was used, especially in K - 6, the teachers showed im-

pressive creativity in integrating these lessons into their ongoing instruction plans. Use of the provided artwork was often ingenious, and several teachers sent examples of imaginative units. In addition, some teachers worked with parents and communities, showing excellent use of public relations and media coverage, and giving suggestions of how application of the program can be facilitated by appropriate cooperation with community groups.

EPILOG

As a result of this evaluation as well as other factors, the curriculum development contract, as described in the Abstract, was extended for a year. The work to be done was along these lines:

(1) Revise curriculum materials as indicated by evaluation.

(2) Create new materials, so that there will be 10 lessons each at 9 levels, as follows: K-6, Jr. High, Sr. High.

(3) Pilot test new and revised materials, and revise as necessary.

(4) Create new materials for other than classroom use involving the community, such as dentist and hygienist instructions, parent guidelines, administrator summary, media releases of several types, and others.

(5) Conduct field test using all components.

(6) Revise if necessary, and prepare implementation plan.

(7) Perform evaluations of appropriate stages.

This additional work has been started and is progressing through the 1975-76 school year. Additional reports will be prepared.

APPENDIX

Evaluation Sheets

A. Training Evaluation Sheet
(for Service Center Trainers) (blue) 27-28

B. Training Evaluation Sheet
(for Participating Dentists) (green) 29-30

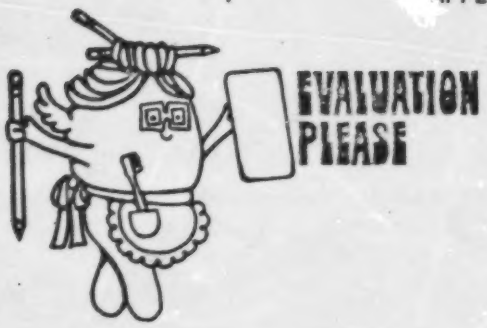
C. Inservice Training Evaluation Sheet
(for Teachers) (pink) 31-32

D. Lesson Evaluation Sheet
(for Teachers) (yellow) 33

E. Summary Evaluation Sheet
(for Teachers) (gold) 34-35

APPENDIX A

(blue)



TRAINING EVALUATION SHEET
(for Service Center Trainers)

We need to hear from you!

You have just participated in a training session designed to prepare you to teach an inservice course for teachers in your Region. The goal is to present an innovative "humanistic" approach to dental health education, stressing motivation, interpersonal awareness, and humor, and the lesson plans provided are all newly developed. Since the training materials and format are also new, we need your help in evaluating them, in order to improve them for broader application.

Name_____ Region_____

Please check the appropriate answer.

1. I feel that this training was generally
   _____clear and sufficient.
   _____too sketchy.
   _____confusing.

2. The training materials were mostly
   _____unhelpful.
   _____only so-so.
   _____helpful.

3. The presentation was
   _____well-organized.
   _____a little loose.
   _____sloppy.

4. The instructions involving technical-dental material were
   _____confusing.
   _____not quite clear.
   _____clear.

5. The instructions involving the educational program were
   _____confusing.
   _____not quite clear.
   _____clear.

6. The whole training course was
   _____too long.
   _____about right.
   _____too crowded.

7. I felt that there was
   _____too much time spent on individual questions.
   _____enough opportunity to ask question
   _____insufficient time for individual problems.

over

8. On the whole, I feel that this training experience was
   _____better than most.
   _____about average.
   _____less satisfactory than most.

9. I would have liked to have more coverage of
   _____the philosophy and rationale.
   _____the lesson plans.
   _____technical (dental) material.
   _____the evaluation procedure.

Please circle T (for true) or F (for false).

10. T F I feel competent to teach this material in my Region.
11. T F I feel that this training was not really necessary.
12. T F This training experience was generally enjoyable.
13. T F The trainers knew their material well.
14. T F There was too much boring repetition.
15. T F I understood the instructions.
16. T F Overhead projectors are generally available to schools in my Region.

17. Please give your reaction to this training effort, including the general tone and approach, in your own words._____

_____

_____

18. How could it be changed to meet your needs more completely?_____

_____

_____

APPENDIX B (green)

TRAINING EVALUATION SHEET
(for Participating Dentists)

We need to hear from you, too!

The training sessions you have been attending are generally designed to present an innovative "humanistic" approach to dental education, emphasizing motivation and interpersonal awareness. The format stresses humor, color, brevity, and reality, and an attempt was made to relate the training materials to the general theme. Please help us to evaluate this training effort so that it can be improved and used in a broad variety of settings.

Please check the appropriate answer.

1. I feel that this training was generally
   _____clear and sufficient.
   _____too sketchy.
   _____confusing.

2. The training materials were mostly
   _____unhelpful.
   _____only so-so.
   _____helpful.

3. The presentation was
   _____well-organized.
   _____a little loose.
   _____sloppy.

4. The instructions involving technical-dental material were
   _____confusing.
   _____not quite clear.
   _____clear.

5. The instructions involving the educational program were
   _____confusing.
   _____not quite clear.
   _____clear.

6. The whole training course was
   _____too long.
   _____about right.
   _____too crowded.

7. I felt that there was
   _____too much time spent on individual questions.
   _____enough opportunity to ask questio
   _____insufficient time for individual problems.

over

8. I would have liked to have more coverage of
   _____the philosophy and rationale.
   _____the lesson plans.
   _____technical (dental) material.
   _____the evaluation procedure.

9. The dental material presented in the inservice training packets is
   _____accurate and sufficient.
   _____technically accurate, but too skimpy.
   _____sufficient, but technically inadequate.
   _____neither accurate nor sufficient.

Please circle T (for true) or F (for false).

10. T F I feel competent to train teachers in the technical-dental information required in this program.
11. T F I feel that this training was not really necessary.
12. T F This training experience was generally enjoyable.
13. T F The trainers knew their material well.
14. T F There was too much boring repetition.
15. T F I understood the instructions.

16. Please react to the general tone and format of this training effort.
    _____
    _____
    _____

17. How could it be changed to meet your needs more completely?_____
    _____
    _____
    _____

INSERVICE TRAINING EVALUATION SHEET
(for teachers)

We need to hear from you!

You have just participated in a training experience designed to prepare you to implement a new "humanistic" approach to dental health education, stressing motivation, humor, and interpersonal awareness. The lesson plans are newly developed; so are the inservice training materials. Your help is needed in evaluating these materials and the training methods used, in order to improve them for broader application.

Name_____ Grade(s) taught_____

School_____ City_____ Region_____

Please check the appropriate answer.

1. I feel that this training was generally
   - _____clear and sufficient.
   - _____too sketchy.
   - _____confusing.
2. The training materials were mostly
   - _____unhelpful.
   - _____only so-so.
   - _____helpful.
3. The presentation was
   - _____well-organized.
   - _____a little loose.
   - _____sloppy.
4. The instructions involving technical-dental material were
   - _____confusing.
   - _____not quite clear.
   - _____clear.
5. The instructions involving the educational program were
   - _____confusing.
   - _____not quite clear.
   - _____clear.
6. The whole training course was
   - _____too long.
   - _____about right.
   - _____too crowded.
7. I felt that there was
   - _____too much time spent on individual questions.
   - _____enough opportunity to ask question
   - _____insufficient time for individual problems.

over

7. I feel that this inservice training experience was
   _____better than most.
   _____about average.
   _____less satisfactory than most.
   _____

8. I would have liked to have more coverage of
   _____the philosophy and rationale.
   _____the lesson plans.
   _____technical (dental) material.
   _____the evaluation procedure.

Please circle T (for true) or F (for false).

9. T F I feel confident about my ability to handle the materials (including brushing and flossing) in this teaching program.
10. T F I really could have done without this inservice training.
11. T F The training experience was generally enjoyable.
12. T F The trainers seemed to know the subject.
13. T F I was bored most of the time.
14. T F Dental education is really needed in my class(es).
15. T F I feel that I understand most of the instructions.
16. T F I know where I can get help with this program if I need it.
17. Please give your reaction to this training effort in your own words.
    _____
    _____
18. How could it be changed to meet your needs more completely?_____
    _____
    _____

APPENDIX D (yellow)

LESSON EVALUATION SHEET

Lesson Title and/or Number_____

Grade Level: (Please circle one)
K-2; 3-6; Jr. Hi.; Sr. Hi.

We really need to hear from you!

The lesson plans in this series are meant to be used, and we need your help, both to improve them and to expand the series. Please give us the benefit of your experience!

***(NOTE: If this is the fifth lesson you have tried, put your first five completed evaluation sheets in the #1 self-addressed stamped envelope, and mail it.)

***(NOTE: If this is the tenth (or last) lesson you have tried, please also fill in the SUMMARY EVALUATION SHEET, then mail the final six sheets in the #2 self-addressed stamped envelope.)

Name_____ Grade(s) taught_____

Please check one answer for each of the following questions.

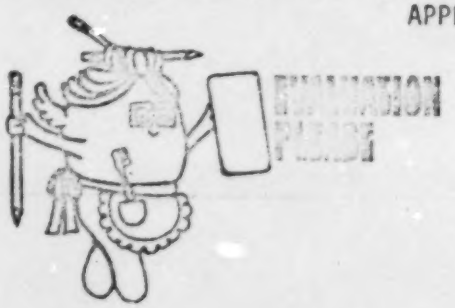
1. This LESSON PLAN was (_____difficult, _____easy) to use.
2. The students' response was
   _____enthusiastic.
   _____generally positive.
   _____so-so.
   _____generally negative.
3. The materials needed were
   _____impossible for me to get.
   _____difficult for me to get.
   _____easy for me to get.
   _____(no extra materials were needed).
4. For my class the visual aids were
   _____helpful, _____so-so, _____unhelpful.
5. My class found the approach
   _____too juvenile, _____about right, _____too advanced.
6. The technical information provided was
   _____sufficient.
   _____OK, but a little sketchy or vague.
   _____totally insufficient.
7. The LESSON PLAN itself was
   _____detailed enough to be helpful.
   _____OK, but a little sketchy or vague.
   _____too skimpy to be really useful.
8. The time required was
   _____too long, _____about right, _____too short.
9. The activities called for in this plan were
   _____at the right age level for my class.
   _____easily adaptable for the age level of my clas
   _____more suitable for a class in grade_____.

Please circle T (for true) and F (for false) for the following items.

10. T F I would use this lesson again.
11. T F The students really got involved.
12. T F The dental health message seemed to get through to the students.
13. T F I used the artwork provided to make transparencies for this lesson. (If your answer is "F", please tell us how you used the artwork.) _____

APPENDIX E

34
(gold)



SUMMARY EVALUATION SHEET
(to be completed after you have tried all ten lesson plans and filled in the ten evaluation sheets)

Grade Level: (Please circle one)

K-2; 3-6; Jr. Hi.; Sr. Hi.

We really need to hear from you just once more!

Well, you've given this new dental education program a trial run. From the point of view of your total experience with the lesson plans, please answer these few questions, slip this sheet into the #2 self-addressed stamped envelope along with your second five evaluation sheets, and mail it--the sooner the better. We're really anxious to hear your opinion!

Name_____ Grade(s) taught_____

Please check the appropriate answers. (If you check more than one, please explain.)

1. Did you use these plans
   _____in a regular classroom?
   _____special subject class?
   _____other (describe)?

2. Were your classes made up of
   _____boys and girls?
   _____boys only?
   _____girls only?

3. Would you describe your class as ethnically or racially
   _____mixed?
   _____homogeneous?

Briefly give any relevant demographic data--about dominant ethnic, racial, cultural, or socio-economic factors operating._____

_____

4. Do you feel that dental problems in your class (or classes) are
   _____widespread?
   _____about normal?
   _____rare?

5. Before participating in this program, have you presented a dental health unit
   _____frequently?
   _____occasionally?
   _____never?

6. Do you feel that teaching programs like this can have a positive effect on dental health habits?
   _____yes _____no _____maybe _____no opinion

over

7. In using these lessons, did you generally feel that you had enough technical support

   (a) in the materials provided? _____yes _____no
   (b) in the inservice training sessions? _____yes _____no
   (c) from local dental sources? _____yes _____no
   (d) from readily available references? _____yes _____no

8. In teaching these lessons, did you

   _____use them in a concentrated "block," i.e., ten in a row?
   _____spread them throughout the trial period?

9. Did your class brush and floss in this program?

   _____yes _____no

   If "yes," how many days? _____

10. Would you like to see development of a wider range of lesson plans in dental health? _____yes _____no _____no opinion

11. Please check one of the following statements:

   (a) _____ I found the overhead projector transparencies easy to make and use and would like to see future lesson plans emphasize this medium.
   (b) _____ I like these lesson plans in this medium, but I would like to see future lesson plans designed for something other than transparencies.
   (c) _____ I used transparencies, but I wish some of these lesson plans, as well as future ones, could be designed for other media.
   (d) _____ I dislike the emphasis on overhead projector transparencies and wish this approach would be dropped.
   (e) _____ I was unable to make or use transparencies at all.

12. As you now look back on your inservice training, do you find that

   (a) the dental-technical aspect was
   _____realistic and sufficient?
   _____too sketchy?
   _____misleading?

   (b) the educational aspect was
   _____realistic and sufficient?
   _____too sketchy?
   _____misleading?

13. Please give the name and/or number of your favorite lesson plan of the ten provided._____

_____

14. Please give the name and/or number of the lesson plan you liked least._____

_____

15. Please give your overall opinion of this program effort in your own (well-chosen, of course!) words._____

_____

_____

16. Can you suggest an activity or lesson topic you would like to see covered in a future dental health unit?_____

_____

_____